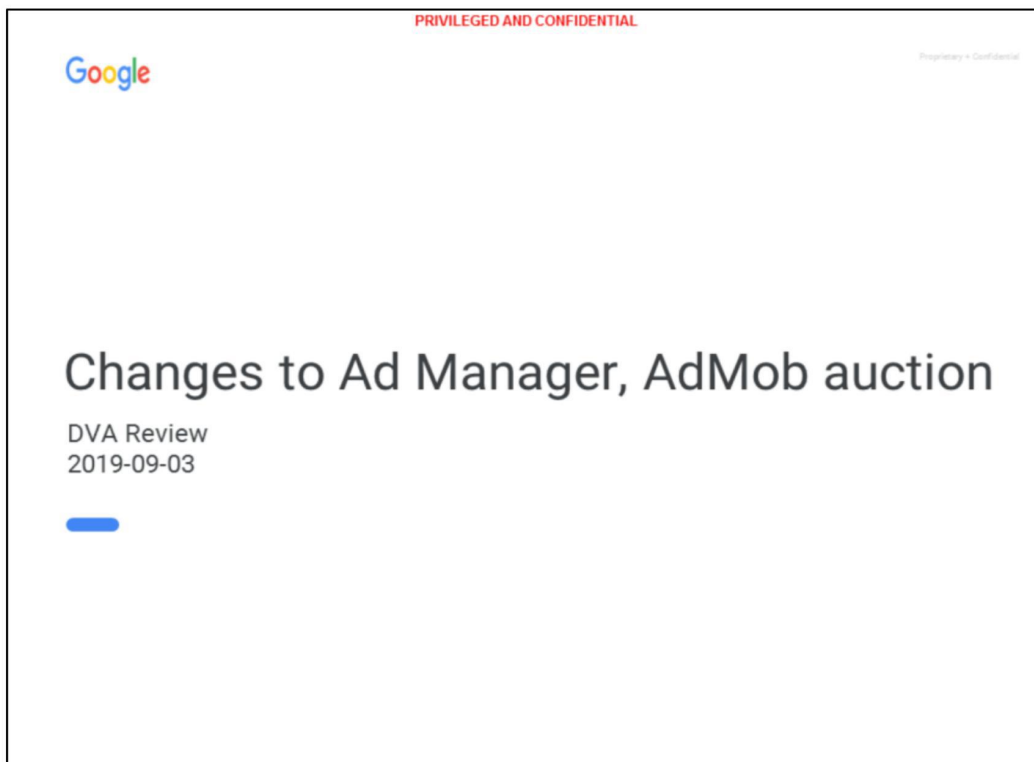


# Exhibit N



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## Agenda

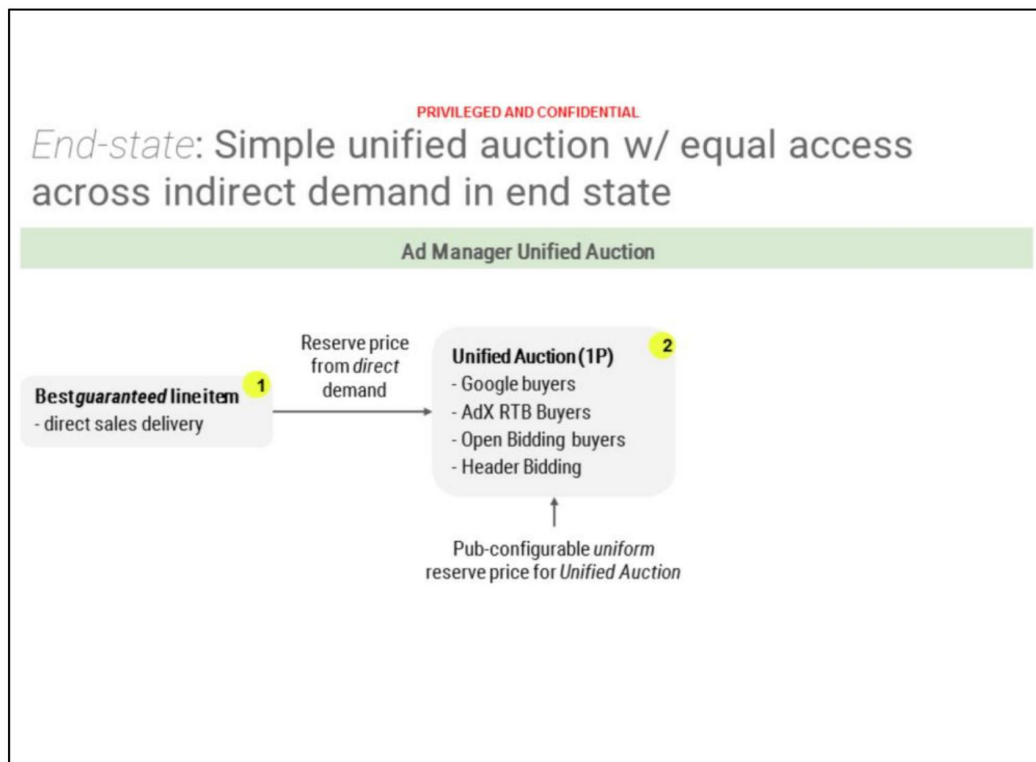
*Today's focus:* Results on Ad Manager Web inventory, sell-side and buy-side view covered separately

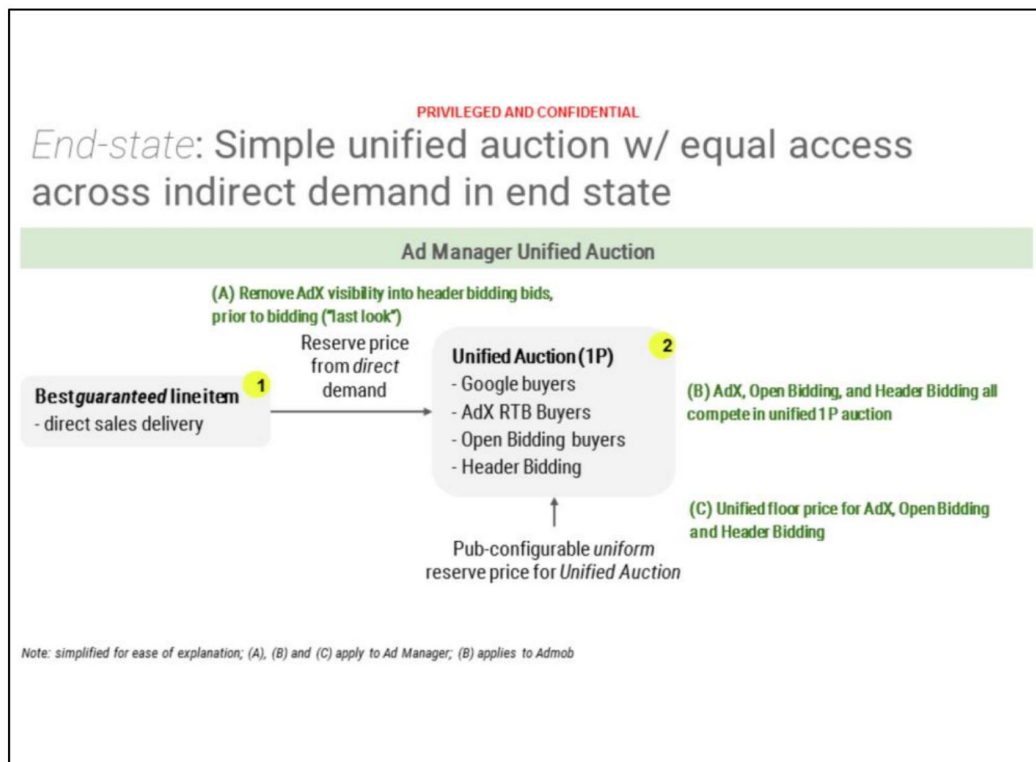
(App performance reviewed earlier -- changes deliver status-quo like outcomes at transition)

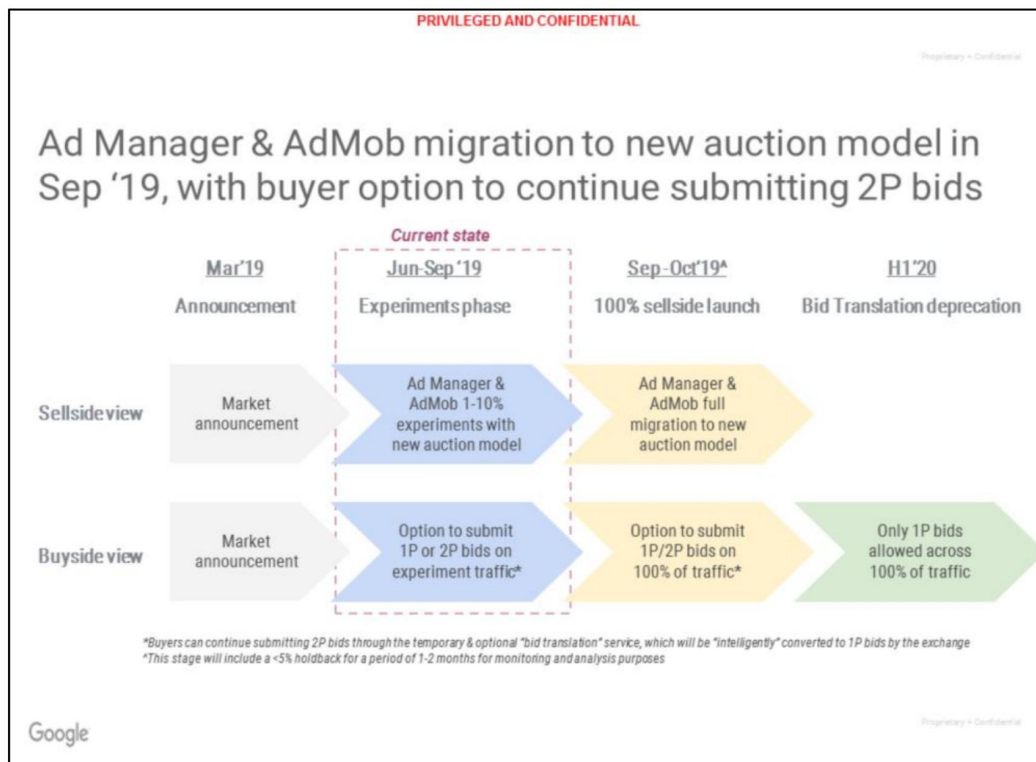
ASK: Approval to complete ~100% sellside transition to new auction model in 2 weeks

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- -1.5% Google gross revenue; neutral Google net revenue; -1.4% publisher payment from Google; neutral publisher payment overall







**Buy-side view (web)**

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## Sell-side view (web)

Impact of individual changes comprising this launch

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## Expected Impact

	Impact on Ad Manager Web inventory	Impact on Ad Manager App inventory	Impact on Admob inventory
<b>(A) Last Look removal</b>	<p>Reduces incentive to inflate HB prices, ensuring fairer competition with AdX/EB ("boost")</p> <p>Reduces AdX/EB visibility into HB prices prior to bidding</p>		
<b>(B) Migration to 1P auction</b>	GDA/ DV3/Auth. Buyers get direct access to the final 1P auction, improving competitiveness against external 1P demand (eg. Exchange/ Open Bidding)		
<b>(C) Unifying floor prices</b>	Levels playing field across AdX, EB, HB, reducing effective AdX floors		
<b>(D) Investments in optimizations</b>	Adaptation of auction optimizations and fine-tuning of bidding logic will improve performance over time		

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## Removing Last Look\* has significant negative impact

	Impressions	Value Clamped	Revenue	Google Profit	GDN profit	Post Revshare Payout
LastLookOverDfpRemnant:GlobalControl 246003051 TOTAL * Adx_Only * Web	548,549,820	1,786,486	690,764	154,233	56,196.1323	511,824
PriceFromSettingWinnerCostExperiment 246003052 TOTAL * Adx_Only * Web	-496,914,005 -9.41% [-9.56, -9.26] %	1,699,227 -4.88% [-5.65, -4.12] %	624,314 -9.62% [-9.95, -9.29] %	144,356 -6.40% [-7.95, -4.86] %	54,296.8083 -3.38% [-7.79, 1.03] %	457,340 -10.64% [-10.79, -10.50] %
LastLookOverDfpRemnant:GlobalControl 246003051 Adwords_Buyer * Adx_Only * Web	333,223,170	418,763	248,815	73,917	35,312.8161	174,720
PriceFromSettingWinnerCostExperiment 246003052 Adwords_Buyer * Adx_Only * Web	-298,497,803 -10.42% [-10.58, -10.26] %	375,698 -10.28% [-11.15, -9.42] %	220,983 -11.19% [-12.16, -10.21] %	69,427 -6.07% [-9.41, -2.74] %	34,838.0716 -1.34% [-8.48, 5.79] %	151,396 -13.35% [-13.48, -13.22] %
LastLookOverDfpRemnant:GlobalControl 246003051 Dtm_Buyer * Adx_Only * Web	108,676,700	1,164,124	287,571	62,827	20,883.3162	200,201
PriceFromSettingWinnerCostExperiment 246003052 Dtm_Buyer * Adx_Only * Web	-102,152,821 -6.00% [-6.18, -5.83] %	1,147,250 -1.45% [-2.59, -0.31] %	269,666 -6.23% [-6.43, -6.02] %	59,667 -5.03% [-5.32, -4.74] %	19,458.7367 -6.82% [-7.04, -6.61] %	187,530 -6.33% [-6.52, -6.14] %

Aggregate:

- -9.6% revenue
- -4.9% value

But allows bundling of other valuable changes, that can be positioned as pro-competitive (fairer platform for \*all\* buyers); Pub outreach to reduce HB boosts planned

\* This impact is measured in a 2P auction state comparing performance with and without last look; [Rasta source](#);

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## Unified Pricing meaningfully improves inventory access by leveling the playing field

	Impressions	Value Clamped	Revenue	Google Profit	Post Revshare Payout
nt::DBM1xWithLegacyRulesAppliedPublic 51390104 Adx_Only * Second price Private exchange * T	233,006,841	395,382	323,221	85,638	221,945
irstPriceAuctionExperiment::DBM1xPublic 51390103 Adx_Only * Second price Private exchange * T	248,115,966 6.48% [6.31, 6.66] %	409,350 3.53% [2.23, 4.84] %	336,966 4.25% [3.85, 4.65] %	88,778 3.67% [2.58, 4.75] %	230,618 3.91% [3.61, 4.21] %
nt::DBM1xWithLegacyRulesAppliedPublic 51390104 Adx_Only * Second price Private exchange * D	60,424,780	170,285	195,109	47,798	131,708
irstPriceAuctionExperiment::DBM1xPublic 51390103 Adx_Only * Second price Private exchange * D	83,970,264 38.97% [38.70, 39.23] %	186,442 9.49% [8.31, 10.67] %	210,711 8.00% [7.64, 8.36] %	51,519 7.78% [7.41, 8.16] %	141,660 7.56% [7.19, 7.92] %

### DBM impact:

- +8% revenue
- +9.5% value
- +39% impressions

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## Overall performance of 1P change positive for AdX Buyers

	Impressions	MatchedQueries	Google Profit	Value Clamped	Revenue
Experiment::ControlSecondPriceAuctions 51390102 TOTAL * Adx_Buyer * Web	210,260,985	239,725,984	40,037	369,810	223,883
cGDNStaticNonVBBFloorGlobalAlchemist 51390159 TOTAL * Adx_Buyer * Web	30,252,572 23.33% [22.98, 23.67] %	35,004,690 25.16% [24.79, 25.53] %	5,736 22.80% [22.27, 23.33] %	37,525 -13.02% [-13.36, -12.69] %	30,950 18.49% [18.02, 18.96] %
Experiment::ControlSecondPriceAuctions 51390102 Adx_Only * Adx_Buyer * Web	119,647,911	148,303,710	30,959	309,070	195,604
cGDNStaticNonVBBFloorGlobalAlchemist 51390159 Adx_Only * Adx_Buyer * Web	19,964,068 43.02% [42.57, 43.47] %	24,685,111 42.67% [42.14, 43.21] %	4,716 30.56% [29.96, 31.16] %	30,682 -14.91% [-15.26, -14.55] %	27,772 21.70% [21.19, 22.20] %

AdX RTB impact:

- +21.7% revenue
- +43% impressions

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## Buyers using Bid Translation service see improved competitiveness

	Impressions	Value Clamped	Revenue	Google Profit	GDN profit	Post Revshare Payout
ment: RtbSurplusMaximizerOffExperiment 263561114 TOTAL * Adx_Only * Web	432,803,661	1,358,981	557,220	118,764	37,909,0700	414,406
urplusMaximizerWithSmartBiddingControl 263561113 TOTAL * Adx_Only * Web	433,513,316 0.16% [0.04, 0.29] %	1,374,839 1.17% [0.56, 1.77] %	558,182 0.17% [-0.24, 0.58] %	118,029 -0.62% [-2.00, 0.77] %	36,720,4203 -3.14% [-7.26, 0.99] %	416,003 0.39% [0.15, 0.62] %
ment: RtbSurplusMaximizerOffExperiment 263561114 Adx_Buyer * Adx_Only * Web	56,279,098	94,383	81,054	13,526	0.0000	67,528
urplusMaximizerWithSmartBiddingControl 263561113 Adx_Buyer * Adx_Only * Web	57,950,269 2.97% [2.62, 3.32] %	98,275 4.12% [3.66, 4.59] %	83,777 3.36% [2.89, 3.82] %	14,068 4.01% [3.48, 4.53] %	0.0002	69,709 3.23% [2.77, 3.69] %
ment: RtbSurplusMaximizerOffExperiment 263561114 Demand_Syndication * Adx_Only * Web	39,150,319	53,609	53,594	2,791	0.0000	50,815
urplusMaximizerWithSmartBiddingControl 263561113 Demand_Syndication * Adx_Only * Web	38,951,665 -0.51% [-0.83, -0.18] %	53,378 -0.43% [-0.80, -0.06] %	53,363 -0.43% [-0.80, -0.06] %	2,777 -0.48% [-0.87, -0.09] %	0.0000	50,597 -0.43% [-0.80, -0.06] %

For AdX buyers, we maximize surplus in the BTS\*:

- +1.2% overall value
- +4.1% AdX buyer value
- +3.4% AdX buyer revenue

\* GDA/ DV3 are not using surplus maximizer; [Rasta source](#)

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## Bundled changes that simplify the product have near neutral impact

- Changes include unified protections, removing anonymous inventory, etc
- Rationale for these changes:
  - Significant product simplification: Clean separation of pricing from protections
  - Cleans up 'branding type' / removes anonymous inventory (not ads.txt compliant)
- Impact is [< 1% AdX web revenue](#)\*

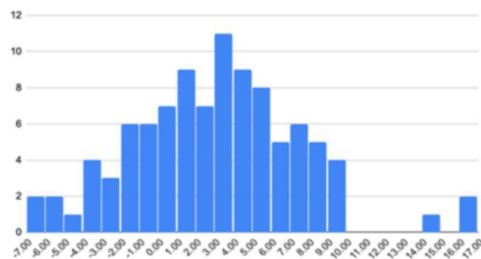
\* when simultaneously enforcing old + new protections

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## Indirect pub revenue impact

Histogram of overall indirect revenue\* impact for top 100 pubs



- Aggregate publisher indirect revenue\* impact of +1.4%
- 76 out of top 100 pubs have a positive impact on indirect revenue

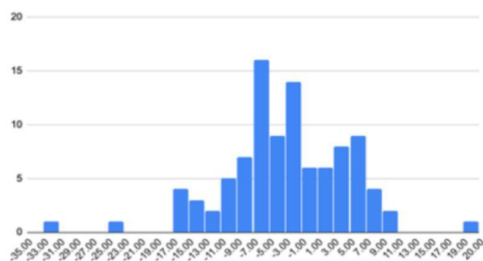
\*Includes revenue from AdX, Exchange Bidding and Header Bidding/ remnant line items

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## Some pubs see decline in programmatic revenue; Planning outreach to top impacted pubs

Histogram of AdX + EB revenue\* impact for top 100 pubs



- Few **strategic** pubs with meaningful (>10% AdX + EB revenue) impact\*
- Most highly impacted pubs have neutral-positive overall revenue impact (AdX + EB + HB)
- Comms strategy: Outreach to pubs with >10% revenue impact, asking them to adjust floor prices and HB boosts

\*Notable ones include Daily Mail, Meredith and NY Post, Axel Springer, EA, Autotrader, MLB

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## Summary

- *Current results:* Near neutral (~1.5%) impact on revenue
- *Short term expectations:* Improved Google performance as (1) AdX buyers stop overpaying, (2) Publishers remove inefficient header bidding 'boosts'
- *Long term expectations:* Continued investments in optimizations across sellside and external + Google buyers should further improve performance. Unified auction which buyers can directly bid into should result in better positioning to compete against external 1P demand (eg. open bidding)

**ASK: Approval to complete ~100% sellside transition to new auction model in 2 weeks**

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- -1.5% Google gross revenue; neutral Google net revenue; -1.4% publisher payment from Google; neutral publisher payment overall

## Appendix

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